

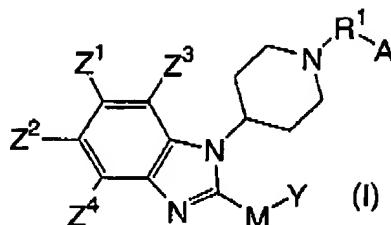
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Amendments to the Claims:

1. (Original) A compound of the following formula:



or a salt thereof, wherein

R¹ is selected from the group consisting of (C₃-C₁₁)cycloalkyl, (C₆-C₁₆)bicycloalkyl, (C₆-C₁₆)tricycloalkyl and (C₈-C₁₆)tetracycloalkyl, wherein said groups are partially saturated, fully saturated or fully unsaturated and are optionally substituted with 1 to 3 substituents independently selected from the group consisting of halo, hydroxy, (C₁-C₅)alkyl and (C₃-C₇)cycloalkyl;

A is attached to the same carbon atom of R¹, that is also attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of (C₁-C₇)alkyl optionally substituted with 1 to 3 halo; (C₂-C₅)alkenyl; (C₂-C₅)alkynyl; phenyl-(C₁-C₅)alkyl optionally substituted at the phenyl moiety with 1 to 3 substituents; hydroxy-(C₁-C₄)alkyl; (C₁-C₄)alkoxy-(C=O); aryl optionally substituted with 1 to 3 substituents; and an aromatic or non-aromatic heterocyclic ring comprising four to ten ring atoms wherein one to four ring atoms are independently selected from nitrogen, oxygen and sulfur and said aromatic or non-aromatic heterocyclic ring is optionally substituted with 1 to 3 substituents, and the phenyl moiety in the substituents attached to said phenyl moiety in the phenyl-(C₁-C₅)alkyl, aryl, or heterocyclic ring is optionally substituted with 1 to 3 substituents independently selected from the group consisting of halo; hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; -CH₂-; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH;

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M is selected from the group consisting of a single covalent bond, CH₂, O, S, SO, SO₂, CO, NH, N[(C₁-C₆)alkyl], CONH and NHCO;

Y is selected from the following:

- (a) 4- to 12-membered bicyclic-carbocyclic rings wherein said bicyclic-carbocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo, hydroxy, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH, wherein the optionally substituted (C₁-C₄)alkyl are attached to the carbon or nitrogen atoms and other substituents are attached to the carbon atoms in the bicyclic-heterocyclic ring; with the proviso that said bicyclic-carbocyclic ring is not a benzofused ring;
- (b) 4- to 12-membered bicyclic-heterocyclic rings wherein 1 to 6 ring atoms are independently selected from nitrogen, oxygen and sulfur wherein said bicyclic-heterocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo, hydroxy, (C₁-C₄)alkyl optionally substituted with 1 to 3 substituents independently selected from halo, hydroxy, (C₁-C₃)alkyl-SO₂NH₂- and NH₂C(=O)NH-; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; aryl optionally substituted with 1 to 3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; benzyl optionally substituted with 1 to 3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH, wherein the optionally substituted (C₁-C₄)alkyl are attached to the carbon or nitrogen atoms and other

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substituents are attached to the carbon atoms in the bicyclic-heterocyclic ring;
with the proviso that said bicyclic-heterocyclic ring is not a benzofused ring;

(c) 5- to 17 membered spirocarbocyclic rings wherein said spirocarbocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo; hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH;

(d) 5- to 17-membered spiroheterocyclic rings wherein 1 to 6 ring atoms are independently selected from nitrogen, oxygen and sulfur, wherein said spiroheterocyclic rings are optionally substituted with 1 to 6 substituents independently selected from the group consisting of halo; hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; hydrazino; azido; ureido; amidino; guanidino; oxo and =N-OH; and

Z¹, Z², Z³ and Z⁴ are independently selected from the group consisting of hydrogen, halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkylsulfonyl; (C₁-C₄)alkyl-CO-; carboxy; (C₁-C₄)alkyl-COO-; amino; NH₂CO-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-SO₂-NH-; phenyl and naphthyl.

2. (Currently Amended) A compound according to Claim 1 or a salt thereof, wherein R¹ is (C₃-C₁₁)cycloalkyl, wherein said cycloalkyl is partially saturated, fully saturated or fully unsaturated and is optionally substituted with 1 to 3 substituents independently

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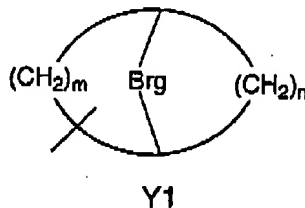
selected from the group consisting of halo, hydroxy, (C₁-C₅)alkyl and (C₃-C₇)cycloalkyl;

A is attached to the same carbon atom of R¹, that is also attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of (C₁-C₇)alkyl optionally substituted with 1 to 3 halo; (C₂-C₅)alkenyl; (C₂-C₅)alkynyl; hydroxy-(C₁-C₄)alkyl; (C₁-C₄)alkoxy-(C=O); aryl optionally substituted with 1 to 3 substituents; and an aromatic or non-aromatic heterocyclic ring comprising four to six ring atoms wherein one to two ring atoms are independently selected from nitrogen, oxygen and sulfur and said aromatic or non-aromatic heterocyclic ring is optionally substituted with 1 to 3 substituents; and the substituents said aryl or heterocyclic wherein each of said is optionally substituted with 1 to 3 substituents, and the substituents attached to said aryl or heterocyclic ring are independently selected from halo; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di(C₁-C₄)alkyl-N-; (C₁-C₄)alkyl-CO-NH- and (C₁-C₄)alkyl-NH-CO-;

M is selected from group consisting of a covalent bond, CH₂, O, S, SO₂, CO, NH, N [(C₁-C₆)alkyl], CONH and NHCO;

Y is selected from the following:

(a) bicyclic rings represented by formula Y1:



wherein m and n are independently 1, 2, 3 or 4; Brg is selected from (CH₂)_p wherein p is 0, 1 or 2, and N-(C₁-C₄)alkyl; and Y1 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-

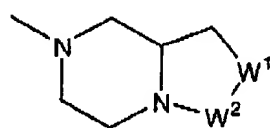
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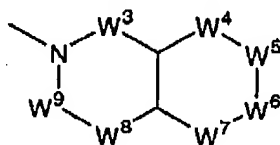
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(C₄)alkyl-CO-; phenyl; benzyl; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; oxo and =N-OH;

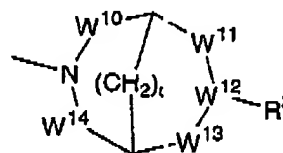
(b) 6- to 10-membered bicyclic-heterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by formula Y2, Y3 or Y4:



Y2



Y3



Y4

wherein

W¹ is selected from CH₂, CH₂CH₂, O, S and NH;

W² is selected from CH₂, O, S, NH and C(=O);

W³ is selected from a covalent bond, CH₂, O, S, NH and C(=O)-NH;

W⁴ is selected from a covalent bond, CH₂, O, S and NH;

W⁵ is selected from a covalent bond, CH₂, CH(CH₂OH), CH(CH₂NHISO₂CH₃), CH(CH₂NHC(=O)NH₂), CH₂CH₂, O, S, NH and C(=O);

W⁶ is selected from CH₂, O, S, NH and N[(C₁-C₄)alkyl];

W⁷ is selected from a covalent bond, CH₂, O, S, NH and C(=O);

W⁸ is selected from a covalent bond, CH₂, O, S and NH;

W⁹ is selected from a covalent bond, CH₂, O, S, NH, CH₂CH₂ and C(=O);

W¹⁰, W¹¹, W¹³ and W¹⁴ are independently selected from covalent bond, CH₂, O, S, and NH;

W¹² is selected from CH and N;

q is 1 or 2; and

R² is selected from hydrogen, (C₁-C₄)alkyl and amino; and

said bicyclic-heterocyclic rings of formula Y2, Y3 or Y4 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of halo; hydroxy;

(C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally

substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; aryl optionally substituted with 1 to

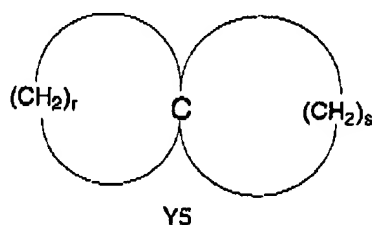
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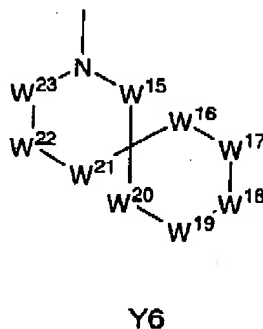
3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; benzyl optionally substituted with 1 to 3 substituents independently selected from halo, (C₁-C₄)alkyl optionally substituted with 1 to 3 halo and (C₁-C₄)alkoxy; -CHO; cyano; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; oxo and =N-OH;

(c) spirocarbocyclic rings represented by formula Y5:



wherein r and s are independently 2, 3, 4 or 5; and said spirocarbocyclic ring or formula Y5 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of hydroxy; (C₁-C₄)alkyl optionally substituted with 1 to 3 halo; (C₁-C₄)alkoxy optionally substituted with 1 to 3 halo; (C₁-C₄)alkyl-CO-; phenyl; benzyl; (C₁-C₄)alkyl-CO-; NH₂-CO-; NH₂-CH₂-; amino; (C₁-C₄)alkyl-NH-; di[(C₁-C₄)alkyl]-N-; (C₁-C₄)alkyl-CO-NH-; (C₁-C₄)alkyl-NH-CO-; oxo and =N-OH; and either of monocyclic carbocyclic ring in Y5 is optionally fused to a benzene or (C₄-C₆)carbocyclic ring;

(d) 10- to 15-membered spiroheterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by formula Y6:



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wherein

W^{15} , W^{16} , W^{17} , W^{18} , W^{19} , W^{20} and W^{23} are independently selected from the group consisting of a covalent bond CH_2 , O, S and NH;

W^{21} is selected from the group consisting of a covalent bond CH_2 , O, S, NH and $N[(C_1-C_4)alkyl]$;

W^{22} is selected from the group consisting of a covalent bond CH_2 , O, S, NH and $C(=O)$; said spiroheterocyclic ring of formula Y6 is optionally substituted with 1 to 4 substituents independently selected from the group consisting of halo; hydroxy; $(C_1-C_4)alkyl$ optionally substituted with 1 to 3 halo; $(C_1-C_4)alkoxy$ optionally substituted with 1 to 3 halo; $(C_1-C_4)alkyl-CO-$; phenyl; benzyl; $-CHO$; cyano; $(C_1-C_4)alkyl-CO-$; NH_2-CO- ; NH_2-CH_2- ; amino; $(C_1-C_4)alkyl-NH-$; $di[(C_1-C_4)alkyl]-N-$; $(C_1-C_4)alkyl-CO-NH-$; $(C_1-C_4)alkyl-NH-CO-$; hydrazino; azido; ureido; amidino; guanidino; oxo and $=N-OH$; and optionally fused to a cyclohexane, benzene or pyridine ring; and

Z^1 , Z^2 , Z^3 and Z^4 are independently selected from the group consisting of hydrogen and halo.

3. (Original) A compound according to Claim 2 or a salt thereof, wherein R^1 is selected from the group consisting of $(C_3-C_{11})cycloalkyl$;

A is attached to the carbon atom of R^1 , which is attached to the nitrogen atom of the piperidine ring, and selected from the group consisting of $(C_1-C_7)alkyl$, hydroxy- $(C_1-C_2)alkyl$, $(C_1-C_4)alkoxy-(C=O)$, $(C_2-C_5)alkenyl$, phenyl and naphthyl;

M is selected from the group consisting of a covalent bond, CH_2 , O, SO_2 , CO, NH, $N[(C_1-C_6)alkyl]$, and $NHCO$;

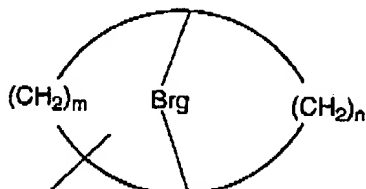
Y is selected from bicyclic rings represented by formula Y1; 6- to 10-membered bicyclic-heterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by

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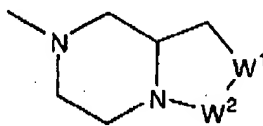
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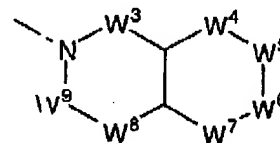
formula Y2, Y3 and Y4; and 10- to 15-membered spiroheterocyclic rings, containing 1 to 4 hetero atoms in the ring, represented by formula Y6:



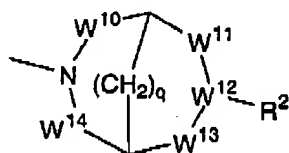
Y1



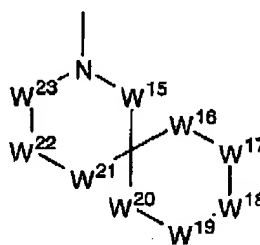
Y2



Y3



Y4



Y6

wherein

m and n are independently 1, 2, 3 or 4;

Brg is N-(C₁-C₄)alkyl;

W¹ is selected from CH₂, CH₂CH₂, O and NH;

W² is selected from CH₂ and C=O;

W³ is selected from a covalent bond, CH₂ and C(=O)-NH;

W⁴ is selected from a covalent bond, CH₂ and O;

W⁵ is selected from a covalent bond, CH₂, CH(CH₂OH), CH(CH₂NHSO₂CH₃),

CH(CH₂NHC(=O)NH₂), CH₂CH₂ and C(=O);

W⁶ is selected from CH₂, NH and N[(C₁-C₄)alkyl];

W⁷ is selected from a covalent bond, CH₂ and C(=O);

W⁸ is selected from a covalent bond and CH₂;

W⁹ is selected from a covalent bond, CH₂, CH₂CH₂ and C(=O);

W¹⁰, W¹¹, W¹³ and W¹⁴ are independently selected from a covalent bond and CH₂;

W¹² is selected from CH and N;

q is 1 or 2;

R² is selected from hydrogen, (C₁-C₄)alkyl and amino;

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W^{15} , W^{16} , W^{17} , W^{18} , W^{19} , W^{20} and W^{23} are independently selected from the group consisting of a covalent bond and CH_2 ;

W^{21} is selected from the group consisting of a covalent bond CH_2 , NH and $N[(C_1-C_4)alkyl]$;

W^{22} is selected from the group consisting of a covalent bond CH_2 and $C(=O)$;

said group of formula of Y2, Y3 or Y4 is optionally substituted with 1 to 4 substituent independently selected from the group consisting of $(C_1-C_4)alkyl$; a yl optionally substituted with 1 to 3 substituents independently selected from halo, $(C_1-C_4)alkyl$ optionally substituted with 1 to 3 halo and $(C_1-C_4)alkoxy$; and benzyl optionally substituted with 1 to 3 substituents independently selected from halo, $(C_1-C_4)alkyl$ optionally substituted with 1 to 3 halo and $(C_1-C_4)alkoxy$; and
said group of formula Y6 is optionally fused to a cyclohexane, benzene or pyridine ring; and optionally substituted with 1 to 4 substituents independently selected from the group consisting of $(C_1-C_4)alkyl$, $(C_1-C_4)alkoxy$ and $aryl$;

Z^1 and Z^2 are independently selected from the group consisting of hydrogen and halo; and Z^3 and Z^4 are both hydrogen.

4. (Original) A compound according to Claim 3 or a salt thereof, wherein R^1 is $(C_6-C_{10})cycloalkyl$;

A is attached to the carbon atom of R^1 , which is attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of $(C_1-C_7)alkyl$ and, phenyl;

M is selected from group consisting of a covalent bond, CH_2 , O, SO_2 , CO, NH, $N[(C_1-C_6)alkyl]$ and $NHCO$,

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wherein R^3 , R^4 , R^5 , R^6 , R^7 and R^9 are independently selected from the group consisting of hydrogen and (C_1-C_4) alkyl;

R^8 is selected from the group consisting of hydroxy, $NHSO_2CH_3$ and $NHC(=O)NH_2$;
and

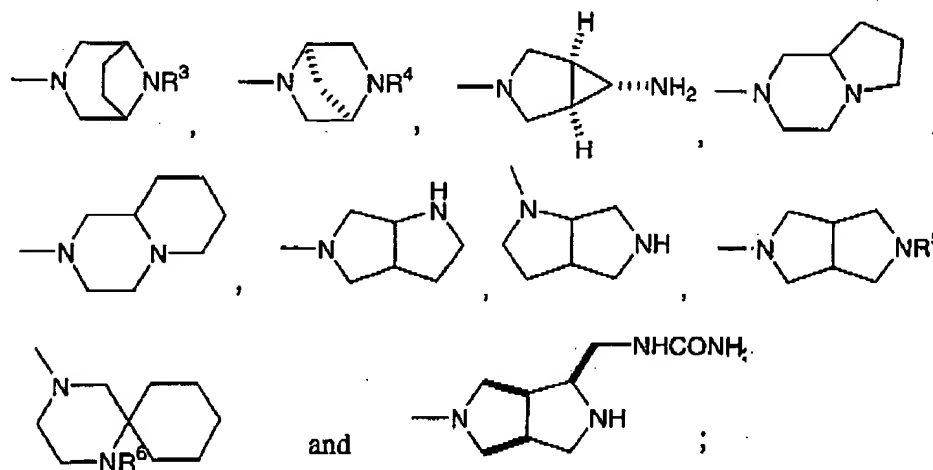
Z^1 , Z^2 , Z^3 and Z^4 are all hydrogen.

5. (Original) A compound according to Claim 4 or a salt thereof, wherein
 R^1 is (C_7-C_9) cycloalkyl;

A is attached to the carbon atom of R^1 , which is attached to the nitrogen atom of the piperidine ring, and is selected from the group consisting of methyl and phenyl;

M is selected from group consisting of a covalent bond, CH_2 , O, CO, NH, $N[(C_1-C_6)alkyl]$ and $NHCO$,

Y is selected from:



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wherein R³, R⁴, R⁵ and R⁶ are independently selected from the group consisting of hydrogen and (C₁-C₄)alkyl; and

Z¹, Z², Z³ and Z⁴ are all hydrogen.

6. (Original) A compound according to Claim 1 selected from
4-{1-[1-(1-methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazole-2-yl}-1,4-diazaspiro[5.5]undecane;
2-hexahydropyrrolo[3,4-*c*]pyrrol-2(1*H*)-yl-1-[1-(1-methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazole;
2-(3,8-Diazabicyclo[3.2.1]oct-3-yl)-[1-(1-methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazole; and
N-[(1*SR*, 3*aSR*, 6*aSR*)-5-{1-[1-(1-Methylcyclooctyl)-4-piperidinyl]-1*H*-benzimidazol-2-yl}]octahydropyrrolo[3,4-*c*]pyrrole-1-ylmethylurea; and a salt thereof.
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Currently Amended) A method for treating a disorder or condition in a mammal, where the disorder or condition is selected from the group consisting of neuropathic pain, ~~inflammatory diseases, inflammation-related hyperalgesia, eating disorder, arterial blood pressure disorders, tolerance to narcotic analgesics, dependence on narcotic analgesics, anxiety, stress disorders, psychic trauma, schizophrenia, Parkinson's disease, chorea, depressant,~~ Alzheimer's disease, dementias, epilepsy and convulsions, or for anesthetizing a mammal including a human, or for alleviating pain, producing a neuroprotective effect, enhancing analgesic, ~~controlling water balance, hearing~~

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~~regulation, controlling sodium ion excretion or ameliorating brain function in a~~
mammal comprising administering to said mammal an effective amount of a compound
of Claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically
acceptable carrier.

11. A pharmaceutical composition comprising an amount of a compound according to
Claim 1, or pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable
carrier.